AMENDMENT UNDER 37 C.F.R. § 1.116 AND

STATEMENT OF SUBSTANCE OF INTERVIEW

Application No.: 10/519,710

Attorney Docket No.: Q85551

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (currently amended): A pulse wave propagation detection system comprising

electrocardiographic signal detection means for detecting an-a first electrocardiographic

signal at a first point, and for detecting a second electrocardiographic signal at a second point;

and

eyeground image detection means for detecting an eyeground image data in

synchronization with each of at least two different points of the electrocardiographic signal

detected by the electrocardiographic signal detection means the first time point and the second

time point, and for detecting pulse wave propagation in an intracerebral blood vessel on the basis

of a change in a diameter of an eyeground vein, the diameter being measured at a target site of

the eyeground image data synchronized with each of the at least two different points of the

detected first electrocardiographic signal detected at the first point and the second

electrocardiographic signal detected at the second point.

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2. (previously presented): A pulse wave propagation detection system according to

claim 1, wherein a state of sclerosis of a capillary artery is detected on the basis of a pulse wave

diagram prepared based on the change in the diameter of the eveground vein.

3. (previously presented): A pulse wave propagation detection system according to claim

1, wherein the target site is an optic papilla.

4. (previously presented): A pulse wave propagation detection system according to

claim 1, wherein the change in the eyeground vein diameter is the difference between the

diameter of an eyeground vein as measured on the basis of an eyeground image synchronized

with an R wave, which is an electrocardiographic signal, and the diameter of the everyound vein

as measured on the basis of an eyeground image synchronized with a T wave, which is an

electrocardiographic signal.

5. (currently amended): A pulse wave propagation detection system according to claim

1, wherein the eyeground image detection means detects the eyeground image data, synchronized

with the detected first electrocardiographic signal detected at the first point and the second

electrocardiographic signal detected at the second point, by extracting, on a computer display, a

stationary eyeground image-images respectively synchronized with the detected-first

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electrocardiographic signal <u>detected</u> at the first <u>point</u> and the <u>second electrocardiographic signal</u>

detected at the second point from a motion eyeground image.

6. (currently amended): A pulse wave propagation detection system according to claim

5, wherein the eyeground image detection means extracts the stationary eyeground image images

 $\underline{\text{respectively}} \ \text{synchronized with the } \underline{\text{detected-}} \underline{\text{first}} \ \text{electrocardiographic signal } \underline{\text{detected at the first}}$

point and the second electrocardiographic signal detected at the second point while displaying

the motion eyeground image and an electrocardiogram on the computer display.

7. (currently amended): A pulse wave propagation detection system according to claim

5, wherein the eyeground image detection means comprises executing means for calculating the

change in the diameter of the eye ground vein on the basis of the eye ground image $\underline{\text{data}}$

synchronized with an arbitrary electrocardiographic signal.

8. (previously presented): A pulse wave propagation detection system according to claim

7, wherein the executing means correlates the change in the diameter of the eyeground vein with

pulse wave propagation through an intracerebral blood vessel, thereby detecting the pulse wave

propagation.

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9. (previously presented): A pulse wave propagation detection system according to claim

7, wherein the executing means correlates the change in the diameter of the eyeground vein with

sclerosis of a capillary artery, thereby detecting a state of sclerosis of the capillary artery.

10. (previously presented): A computer readable storage medium storing a program

which executes, on a computer, the pulse wave propagation detection system as recited in claim

5.

11. (canceled).

12. (previously presented): A pulse wave propagation detection system according to

claim 2, wherein the change in the diameter of the eyeground vein is a change in the diameter of

the eyeground vein at an optic papilla.

13. (previously presented): A pulse wave propagation detection system according to

claim 2, wherein the change in the eyeground vein diameter is the difference between the

diameter of an eyeground vein as measured on the basis of an eyeground image synchronized

with an R wave, which is an electrocardiographic signal, and the diameter of the evergound vein

as measured on the basis of an eyeground image synchronized with a T wave, which is an

electrocardiographic signal.

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14. (currently amended): A pulse wave propagation detection system according to claim

2, wherein the eyeground image detection means detects the eyeground image data, synchronized

with the detected <u>first</u> electrocardiographic signal <u>detected at the first point and the second</u> electrocardiographic signal detected at the second point, by extracting, on a computer display, a

stationary eveground image-images respectively synchronized with the detected-first

electrocardiographic signal detected at the first point and the second electrocardiographic signal

detected at the second point from a motion eyeground image.

15. (currently amended): A pulse wave propagation detection system according to claim

14, wherein the eyeground image detection means extracts the stationary eyeground $\frac{1}{1}$

 $\underline{images\ respectively}\ synchronized\ with\ the\ \underline{detected\ \underline{first}}\ electrocardiographic\ signal\ \underline{detected\ at}$

the first point and the second electrocardiographic signal detected at the second point while

displaying the motion eyeground image and an electrocardiogram on the computer display.

16. (currently amended): A pulse wave propagation detection system according to claim

14, wherein the eyeground image detection means comprises executing means for calculating the

change in the diameter of the eyeground vein on the basis of the eyeground image data

synchronized with an arbitrary electrocardiographic signal.

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17. (previously presented): A pulse wave propagation detection system according to

claim 16, wherein the executing means correlates the change in the diameter of the eyeground

vein with pulse wave propagation through an intracerebral blood vessel, thereby detecting the

pulse wave propagation.

18. (previously presented): A pulse wave propagation detection system according to

claim 16, wherein the executing means correlates the change in the diameter of the eveground

vein with sclerosis of the capillary artery, thereby detecting the state of sclerosis of the capillary

artery.

19. (previously presented): A computer readable storage medium storing a program

which executes, on a computer, the pulse wave propagation detection system as recited in claim

14

20. (canceled).

21. (currently amended): A pulse wave propagation detection system according to claim

1, wherein the change in the diameter of the eveground vein is a difference between diameters of

the eyeground vein at target sites corresponding to the at least two different points of the detected

first electrocardiographic signal detected at the first point and the second electrocardiographic

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signal detected at the second point, and when the difference is substantially recognized, presence of the pulse wave propagation in the intracerebral blood vessel is determined.

22. (currently amended): A pulse wave propagation detection system according to claim 1, wherein the change in the diameter of the eyeground vein is a difference between a first diameter of the eyeground vein at a first target site of the eyeground image in-data synchronized with an R wave of the first electrocardiographic signal and a second diameter of the eyeground vein at a second target site of the eyeground image in-data synchronized with a T wave of the second electrocardiographic signal, and when the difference is substantially recognized, presence of the pulse wave propagation in the intracerebral blood vessel is determined.